Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Establishing the Digital Opportunity Data Collection	)	WC Docket No. 19-195
	)	
	)	
Modernizing the FCC Form 477 Data Program	)	WC Docket No. 11-10

COMMENTS OF ILLINOIS DEPARTMENT OF INNOVATION & TECHNOLOGY

In response to the Commission's recent Notice of Proposed Rulemaking (the "Notice") in the above-captioned dockets,[1] Illinois Department of Innovation & Technology ("DoIT") offers the following comments concerning the collection of data on the geographic availability of broadband service using the newly-adopted Digital Opportunity Data Collection process. In the accompanying *Broadband Data Collection Order*, the Commission began the process of updating its broadband location data gathering process to rely on service area polygons. The Notice seeks comment on various implementation issues.

DoIT supports the Commission's decision to require service providers to submit broadband service area polygons. In these comments, DoIT focuses on ways in which the Commission can make the resulting data more accessible and usable by state broadband authorities in pursuing parallel state-level efforts to catalyze broadband deployment and otherwise to inform state broadband policy decisions.

Background

DoIT was created by statute on July 20, 2018 and, today, it is responsible for all information technology functions of agencies under the jurisdiction of the governor of Illinois. DoIT delivers best-in-class innovation to Illinois state agencies, fostering collaboration and

[1] *Establishing the Digital Opportunity Data Collection*, WC Docket No. 19-195, Report and Order and Notice of Proposed Rulemaking, FCC 19-79 (rel. Aug. 6, 2019). These comments will refer to the Report and Order portion of this document as the "*Broadband Data Collection Order*."

empowering employees to provide better services to the state's residents, businesses, and visitors. DoIT is leading a digital transformation to gain efficiencies and improve delivery of government services, improve security and data protection, eliminate unnecessary redundant systems, and foster greater interagency collaboration.

DoIT has a leading role in the Governor's Connect Illinois initiative, which includes a capital investment from Rebuild Illinois, the creation of a Broadband Advisory Council and Broadband Office, and a new program that will provide all Illinois public K-12 students access to high-speed broadband at no charge.[2] Over the next several years, Connect Illinois will award $400 million in broadband grant funding to support broadband infrastructure investment by Internet service providers, and commit an additional $20 million in a capital program to expand and improve the ICN.[3]

Discussion

The intent of the Connect Illinois program is to expand broadband availability and performance in the state by awarding support to broadband service providers to deploy broadband infrastructure that will serve eligible unserved and underserved customers. To succeed, the program will need access to accurate data on the current extent of broadband availability, as well as the locations of unserved and underserved customers.

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[2] *See* Illinois Department of Commerce and Economic Opportunity, "Connect Illinois," *available at:* https://www2.illinois.gov/dceo/ConnectIllinois/Pages/default.aspx (visited Sept. 17, 2019).

[3] *See* Press Release, "Gov. Pritzker Launches Connect Illinois, a $420 Million Statewide Broadband Expansion Under Rebuild Illinois" (Aug. 15, 2019), *available at:* https://www2.illinois.gov/dceo/Media/PressReleases/Pages/PR20190815.aspx (visited Sept. 17, 2019).

A. The FCC Should Ensure that Accurate Service Availability Maps and Data Are Available to State Governments

DoIT agrees that the Digital Opportunity Data Collection will improve the quality and detail of information necessary to understand broadband deployment across the nation.[4] In response to the Notice's request for comment on measures that the Commission can take to ensure that the value of these data is fully realized by all stakeholders,[5] DoIT is pleased to share its perspective as a state agency with responsibility for broadband deployment issues.

1. Accurate Broadband Maps Are Equally Essential to State and Federal Broadband Deployment Efforts

In parallel with the Commission and other federal government agencies, state governments are also pursuing policies that encourage or support broadband deployment. In Illinois, Connect Illinois will provide some $400 million in funding for broadband deployment in unserved and underserved areas of Illinois over approximately the next five years, chiefly through state awards of grant funding to broadband service providers to support availability of affordable broadband service in the state.

Accurate and detailed data identifying the unserved and underserved areas of the state are critical to the success of Connect Illinois. That information allows DoIT to make awards that will efficiently maximize the impact on those in the state that do not have access to broadband, and for whom the market is unlikely to provide broadband service in the near term. Currently, the best data available to identify the unserved and underserved to be targeted by that program come from the Commission's Form 477 broadband deployment reports. But, with those data suffering from

[4] Notice at ¶ 84.
[5] *Id.*

well-recognized shortcomings,[6] DoIT welcomes the Commission's efforts to gather more accurate and more detailed data *and* to make those data more accessible and valuable across a range of stakeholders, including state government partners.[7]

Generating more accurate and detailed data will streamline the award process for the Commission and state agencies alike. Today, Form 477 data are not sufficiently granular to identify all unserved locations. A service provider reports a census block as "served" if it can provide broadband anywhere in the census block, even if the census block also contains many unserved locations as well.[8] And, specific geocoded customer locations are not reported in the Form 477 at all, meaning that it can be a time-consuming and laborious process to identify which, if any, locations in a census block are unserved.

As a result, applications for Connect Illinois awards will likely need to be subject to a challenge process that gives other service providers and interested parties the opportunity to refute the applicant's claims regarding the extent of existing broadband service. These challenge processes are likely to take longer using currently available customer location and service availability data than it would if the detailed polygons, broadband-serviceable location map, and Commission-led data improvement processes discussed in the Notice were already in place.[9]

2. The FCC should Include in its Maps and Datasets Information on Areas Covered by State-Level Deployment Grant Awards

DoIT endorses the Commission's desire to "integrat[e] related but distinct data resources to produce a unified picture of broadband data."[10] In response to the Commission's request for

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6 *See, e.g., Broadband Data Collection Order* at ¶ 10.
7 Notice at ¶ 84.
8 *Broadband Data Collection Order* at ¶ 6.
9 *See, e.g.,* Notice at ¶ 82.
10 Notice at ¶ 84.

comment on what data to include in the effort,[11] DoIT believes that it would make the Commission's broadband maps even more valuable if they were to include information on areas covered by state-level awards of financial assistance for broadband deployment, even if broadband has not yet been made available in those areas.

As with data on federal awards of support for broadband deployment, state-level award data should inform future policy decisions – by both state and federal officials – on how to target universal service support for broadband deployment most efficiently and effectively. But, whether submitted as service polygons or on the Form 477, the Commission's focus has been on collecting information on the areas where broadband service is actually available as of the date of the report. DoIT recommends that the Commission also collect information on areas where other governmental entities have committed funds to support deployment of facilities that will enable new broadband services, even if the service is not yet available for purchase. In addition to areas where funding was committed successfully, such data would include areas where the recipient is in the process of deploying supported facilities, but where broadband service is not yet available.

B. The FCC Should Compile Accurate and Detailed Broadband-Serviceable Location Data

As the Commission correctly recognizes, while broadband service polygons will provide useful data on the extent of broadband deployment, they will be far more valuable to regulators, policymakers, and other stakeholders when combined with data on the number and location of

[11] *Id.*

customers that still lack access to broadband.[12] Just as the Commission proposes to do in its recent *Rural Digital Opportunity Fund* Notice of Proposed Rulemaking,[13] Illinois intends to move forward with the initial Connect Illinois grant awards by using the data that are currently available from Form 477 filings as the starting point for identifying eligible census blocks in Illinois. DoIT looks forward, however, to a time when the Commission is able to make available information, not just on the precise geographic contours of each service provider's broadband service offerings, but also on the location of any unserved customers that fall outside of any service contour.

DoIT therefore supports the Commission's proposal to create a map of all broadband-serviceable locations in the nation.[14] Such information would help improve the efficiency and speed of Connect Illinois grant awards. When combined with broadband service polygons, detailed information about the precise location of unserved customers will help applicants for Connect Illinois funding to develop their applications more quickly, design their proposed network facilities with greater precision, and estimate broadband deployment and operating costs more accurately. Similarly, the state will be able to target Connect Illinois funds based on which unserved areas of the state, in fact, contain potential customer locations, and which are completely vacant.

DoIT urges the Commission, in creating this broadband-serviceable location "fabric" also to collect the data necessary to classify the broadband-serviceable locations by type, *e.g.*,

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[12] Notice at ¶ 99 (observing that, "simply knowing what parts of a census block lack broadband service does not provide enough information by itself to identify the specific locations within that census block that lack fixed broadband availability").

[13] *Rural Digital Opportunity Fund*, WC Docket No. 19-126, Notice of Proposed Rulemaking, FCC 19-77 (rel. Aug. 2, 2019), at ¶ 45.

[14] Notice at ¶ 100.

residential, business, various types of community anchor institutions, etc.[15] Different types of broadband customers have differing service needs, and it would best inform policy choices if the data were available to differentiate customer locations by type in this way.[16]

C. DoIT supports availability of a bulk upload tool for state government challenges to availability polygons.

In the *Broadband Data Collection Order*, the Commission determined to use public input to improve the accuracy of broadband coverage polygon maps.[17] In the Notice, the Commission seeks comment on implementation details, including whether the Commission should permit bulk filing of challenges and, if so, whether it should do so only from selected parties.[18]

DoIT believes that the Commission should accept bulk challenges from state, local, and Tribal governmental bodies. The Notice cites potential concerns that the bulk challenge process could become unreasonably burdensome, if bulk complaints were to be filed in bad faith or for malicious reasons.[19] The use of an automated tool or "bot" to challenge every address in a fixed broadband provider's footprint could ultimately undermine the integrity and reliability of the polygon data by preventing service providers from focusing on addressing good faith challenges, correcting genuine errors, and identifying potential network issues.

DoIT believes that these issues are unlikely to be a factor in bulk challenges from governmental authorities. Connect Illinois, for example, is likely to reveal extensive data on the geographic scale of broadband service in Illinois, and DoIT may also conduct additional audits to

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[15] *See* Notice at ¶ 100 (citing a need to map, "houses, businesses, structures"), ¶ 101 (seeking comment on what types of locations to include in the data collection).

[16] *See, e.g., Digital Opportunity Data Collection*, WC Docket No. 19-195, *Ex parte* Letter from B. Lynn Follansbee, Vice President – Policy and Advocacy, USTelecom (filed Aug. 22, 2019), Attachment, "BSLF Imagery Review Flow Chart" (discussing identification of each broadband-serviceable location as a residence, business, anchor institution, or "a private or public piece of communication infrastructure (ex.: Data Center, Cellular Tower, etc.")).

[17] *Broadband Data Collection Order* at ¶¶ 18-20.

[18] Notice at ¶¶ 97-98.

[19] *Id.* at ¶ 97.

verify the reliability of such data. If large discrepancies emerge between the polygon maps submitted to the Commission and the actual geographic extent of broadband service, DoIT should have access to a bulk filing tool necessary to submit that information quickly and efficiently. The use of such a bulk filing tool by governmental entities that lack any competitive, commercial, or malicious motive will sharply limit any risk of abuse.

D. Until the Broadband-Serviceable Location Map Is Complete, the Commission Should Make Available an Address Lookup Tool

The Notice seeks comment on whether the Broadband Mapping Coalition's address "lookup" tool will be necessary, once the broadband-serviceable location fabric has been integrated with broadband service area polygons submitted by service providers.[20] DoIT believes that an address lookup tool would be a valuable complement to the map. A lookup tool would streamline the process of checking the service status of any given address in the nation, and remove ambiguity that could arise based on visual inspection of the integrated service polygon map alone. As the Commission observes, accuracy and reliability concerns may arise with available customer location geocode data, particularly in rural areas where coverage data will be most critical.[21] Therefore, without a lookup tool, it may be unclear whether a specific address located near the polygon boundary is truly served or unserved. The lookup tool, in contrast, will improve clarity, and help state government authorities target state-level broadband support to areas that both lack service and are not covered by an award of federal universal service or grant-award deployment funding.

[20] Notice at ¶ 108.
[21] *Id.*

Conclusion

For the foregoing reasons, DoIT urges the Commission to implement the Broadband Data Collection so as to maximize the accuracy and detail of broadband deployment information. The Commission should do so in a way that increases the value of these data to state-level governmental authorities with responsibility for broadband deployment issues, so that they can efficiently and reliably target state-level broadband grant awards to unserved and underserved areas of their respective states.

Respectfully submitted,

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